



STDN DAILY REPORT
FOR GMT DAYS
19, 20, 21 AND 22 APRIL, 2001

Part I. Operations

19 APRIL

SN Anomalies:

1. STGT/TOPEX Support

19/1740-1747Z

Late acquisition due to spacecraft misconfiguration. POCC sent 2 return reacquisitions with no joy. POCC checked to verify spacecraft was in view. POCC reconfigured spacecraft to 1k/1k and event locked up. (POCC reported this configuration will be built into their spacecraft for these 1k/1k events on TDS for tests next week.) TTR # 23844

1740-1800Z TDS SSA2 7 Mins 15 Secs Svc/Data Loss
Recoverable

B. ISS Anomalies - None.

C. GN Anomalies:

1. SGS/QST Support

19/1956-2005Z

This is the antenna movement taken from the track analyzes: 19:57:31 to 19:58:05 antenna moves as normal 19:58:05 to 19:59:18 antenna locks into negative EL. Operator forces antenna manually outs of this situation 10:59:18 to 20:05:11. Antenna went to AZ interlock (at 316 deg). It was impossible to manually force it out of this. Got AOS at 20:05:11. Tracking was good after AOS, but it was impossible to get a steady 16K BS lock. Qmock tried to command a new 2M dump, but only a test

command went through to the S/C. CDS ID# 18526

11M 1957-2012Z 7 Mins. 40 Secs. Service/Data Loss
Recoverable (Unk)

2. AGS/WIRE Support

19/1214-1215Z

Had negative acquisition at the predicted AOS of 109/121349Z, at AOS plus 45 seconds operator began entering negative time bias in 5 second intervals, upon reaching -60 seconds the bias was driven in the positive direction. AOS was at 109/121513Z with a positive 24.1 second bias. The project reported that AOS was before the data dump started and that all commands were processed successfully. CDS ID# 18531

TOTS-1 1214-1223Z 1 Min. 24 Secs. Service/Data Loss
Recoverable

3. WGS/IP-3 Support

19/1456-1507Z

No downlink from spacecraft, reason unknown.
Post-pass systems checked nominal. CDS ID# 18532

TOTS-3 9 Mins Service/Data Loss Recoverable (Unknown)

D. STS-100 liftoff at 1841.952Z was nominal.

20 APRIL

A. SN Anomalies - None.

B. ISS Anomalies:

1. STGT/ISS Support

20/0019-0102Z

ISS DFE advised, about 10 minutes prior to LOS, they were not seeing their 50Mb dump. COMM MANAGER reported that GE

Americom was switched to incorrect site. TTR # 23845

001944-010200Z TDS KSA2 42 Mins 16 Secs Svc/Data Loss Recoverable

C. GN Anomalies:

1. SKS/QST Support

20/1404-1418Z

Loss of 2MB data due to a full disk on telemetry processing system. Error has been corrected. CDS ID# 18541

11M 13 Mins 21 Secs. Service/Data Loss Non-Recoverable

2. WGS/TERRA Support

20/1521-1523Z

Operator Error. Project reported not receiving 512KB data after WGS reported bit sync lock. Investigation revealed that GSIP data and clock patches were reversed. After correcting problem, project began receiving 512KB data. Post pass playback was performed with all data recovered. CDS ID# 18545

11M 1520-1530Z 2 Mins. Service/Data Loss Recoverable

21 APRIL

A. SN Anomalies:

1. ERBS Support

21/155130-160858Z

ERBS POCC reported NEG ACQ they were locked on IR & Q-CH, but no I-CH lock. Repeated return REACQs did not change status; no I-CH lock on spin up chains. Sent OPM-7, no luck. Sent OPM-3, FREQ respecification, no lock. Sent OPM-3 to mode-1, and then back to mode-2, still no lock. TTR # 23849

TDW 1551-1615Z 17 Mins. 28 Secs. Service/Data Loss

Recoverable (unknown). Investigation revealed the spacecraft was incorrectly configured for .6K on I-CH, vice 12.8K on I-CH. The spacecraft data rate was changed to 12.8K and lock was achieved.

B. ISS Anomalies - None.

C. GN Anomalies:

1.WGS/SWAS Support

21/0508-0520Z

At the start of the pass the antenna was commanded to an AZ limit, elevation was moving up but AZ was not tracking. Manually brought the antenna out of limits however the programmed angles were not correct. Attempts to acquire were unsuccessful until late in the pass. Reason for failure is unknown at this time, an ephemeris update had been done at the start of the shift, ephemeris was from day 109. There had been a TOMS pass prior to this pass and a SAMPEX pass after with no problems on either of these. CDS # 18547

12 Minutes Service/Data Loss Unknown if Recoverable

22 APRIL

A. SN Anomalies - None.

B. ISS Anomalies - None.

C. GN Anomalies:

1. AGS/FAST Support

22/0852-0918Z

At AOS the antenna was found at - EL and the processing of events (equipment setup) for the support was halted. Support was

transferred to TOTS-1, with no impact. The Leo-T antenna was found at stow (90 deg. EL) post pass, the system was rebooted, for the next support. CDS # 18548

LEO-T No Service/Data Loss Declared.

Part II. Testing Anomalies

A. SN Test:

1. NAB K-Band Integration 19/1632-19/2057Z NCC, NISN/STGT/
Test National Association
Broadcaster Eng.

Objectives:

- A. Evaluate the capability of the NAB forward link equipment to receive TDRS pure carrier on the Ku Band forward link.
- B. Evaluate the capability of the NAB transmitter equipment at STGT to transmit NAB telemetry data on the Ku Band Return link at the Intermediate Frequency (IF) level.

Results: Objective Partially Met.

Remarks:

National Association of Broadcasters (NAB) engineers at RFSOC worked with the new modem for the forward link and verified its performance; both demodulators were confirmed good. Equipment for a data stream from NRL was configured and it is working. The engineers also attempted to work with the new return link modem. NAB and STGT engineers were unable to make forward progress testing on the NAB return link equipment. A new upconverter will be installed at RFSOC for this activity. Additional NAB data processing equipment is being installed at STGT for the demonstration during the week of April 23, 2001. Testing continues on April 20, 2001.

B. GN Test - None.

Part III. Equipment Status Changes - None.

\$ = Changed ETRO

** = New Items

Part IV. Scheduled Activities:

GOES 11 Engineering Test	23/1230-1430Z
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NAB K-Band Demonstration	23/1720-24/0100Z
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Part V. Launch Forecast Changes

* 1.) W1576LS (PEGASUS/HESSI) 1400Z	158 07 JUN.,2001 T-0 =
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